

January 5, 2015

Natural Gas Trends

Highlights

Corpus Christi LNG project gains FERC approval

Federal regulators have approved Cheniere's plan to export liquefied natural gas from Corpus Christi, Texas, following recommendations that the export facility and related infrastructure would result in minimal environmental impact if certain conditions are met. "We conclude that, with the conditions required herein, Corpus Christi Liquefaction's project results in minimal environmental impacts and can be constructed and operated safely. Accordingly, we find that, subject to the conditions imposed in this order, Corpus Christi Liquefaction's proposal is not inconsistent with the public interest," the FERC said in an order on Tuesday. Cheniere now awaits approval from the DOE to export LNG from the project to countries that do not have free trade agreements with the US. DOE makes public interest determinations for energy export projects, while FERC is responsible for the export facility design, engineering and environmental footprint – a far more detailed and lengthy review process than DOE's. Cheniere already has DOE approval to export to FTA countries.

Cheniere's Corpus Christi project is designed for up to three liquefaction trains capable of exporting the LNG equivalent of 2.1 Bcf/d of gas, and vaporization facilities intended to send 400,000 Mcf/d of imported gas out to existing interstate and intrastate natural gas pipelines. The project would include building a 23-mile, 48-inch-diameter bi-directional pipeline, running from the LNG facility to a connection point near Sinton, Texas. According to FERC's order, the pipeline will have a peak capacity of 2.25 Bcf/d. The project will also include two compressor stations with a combined 53,548 horsepower, according to FERC's order, and other ancillary facilities along the pipeline.

In an October environmental impact statement, FERC staff found that the environmental impacts of the project "would be avoided or minimized" by implementing over 100 mitigation measures during its construction and operation. While finding that the project would negatively affect fish habitat, wetlands and air quality, staff said that the project would not have "significant" adverse environmental impacts if the mitigation measures were imposed. FERC, in the order Tuesday, agreed with staff's findings in the EIS, and in doing so, rejected calls from the EPA's Region 6 Office in Dallas to broaden the scope of the environmental review of the project.

In a November letter to FERC, EPA said that staff's EIS failed to resolve concerns about greenhouse gas emissions linked to the project and indirect effects from the construction and operation of the facility. Renewing a call from comments on the draft EIS, EPA recommended that FERC engage in a "conceptual-level discussion of possible impacts from increased production due to proposed facilities would be useful for decision makers and the public." But FERC declined, saying in part that natural gas production was not "sufficiently causally related" to the project, and that environmental impacts from the project are not "reasonably foreseeable." FERC went on to say that "it is speculative as to where the gas processed by the project will originate, and the siting and timing of any wells and gathering line are subject to local permitting authorities. Accordingly, we cannot meaningfully analyze the potential associated environmental impacts." Officials with Cheniere declined to comment Wednesday.

In a note Wednesday, analysts at Tudor Pickering Holt noted that Cheniere has been able to secure contracts and debt financing for the project this month "in face of declining economics as arbitrage between US and global LNG prices shrinks." The analysts also said that the project is expected to begin construction in 2015, and that FERC has approved almost 9 Bcf/d in export capacity from five different facilities.

Source: Platts Gas Daily

Data

- February 2015 Natural Gas Futures Contract (as of January 2), NYMEX at Henry Hub closed at \$3.003 per million British thermal units (MMBtu)
- February 2015 Light, Sweet Crude Oil Futures Contract WTI (as of January 2), closed at \$52.69 per U.S. oil barrel (Bbl.) or approximately \$9.08 per MMBtu

Last week: Texas colder than normal

For the week beginning 12/28/14 and ending 1/3/15, heating degree days (HDD) were higher than normal (colder) for the week but lower than normal (warmer) and for the year to date for most Texas cities shown.

Source: www.cpc.ncep.noaa.gov

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 1/3/15	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	288	78	1689	-9%
Austin	168	63	767	11%
DFW	180	33	951	-5%
El Paso	193	44	931	-20%
Houston	137	41	557	-12%
SAT	146	43	564	-16%
Texas**	168	47	815	-3%
U.S.**	207	3	1715	-6%

* A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs are calculated. ** State and U.S. degree days are population-weighted by NOAA.

-999 = Normal Less Than 100 or Ratio Incalculable

Last week: U.S. natural gas storage at 3,220 Bcf

For the week ending 12/26/2014 working gas in storage decreased from 3,246 Bcf to 3,220 Bcf. This represents a decrease of 26 Bcf from the previous week. Stocks were 232 Bcf higher than last year at this time and 81 Bcf below the 5 year average of 3,415 Bcf.

Source: <http://ir.eia.gov/ngs/ngs.html>

U.S. WORKING GAS IN STORAGE				
Region	Week ending 12/26/14	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,660	1,689	-29	-3.6%
West	461	461	0	1.8%
Producing	1,099	1,096	3	-2.4%
Lower 48 Total	3,220	3,246	-26	-2.5%

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

Last week: U.S. gas rig count down for the week

The gas rig count for the U.S. was down twelve for the week and down 44 when compared to twelve months ago. The total rig count for the U.S. was down 29 from last week but up 60 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

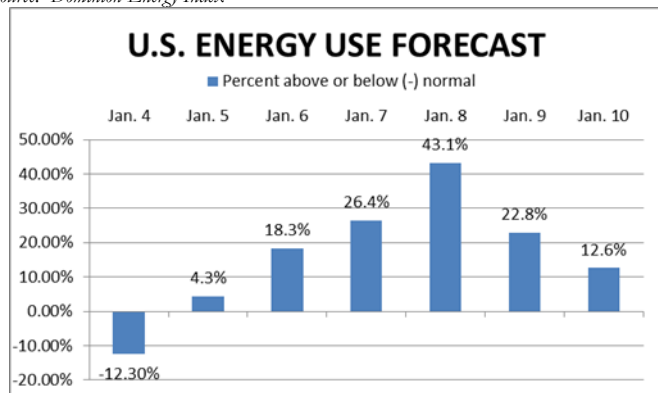
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 1/2/2015	+/- prior week	Year ago	+/- year ago
Texas	840	-12	832	8
U.S. gas	328	-12	372	-44
U.S. oil	1482	-17	1378	104
U.S. total	1811	-29	1751	60
Canada	208	-48	282	-74

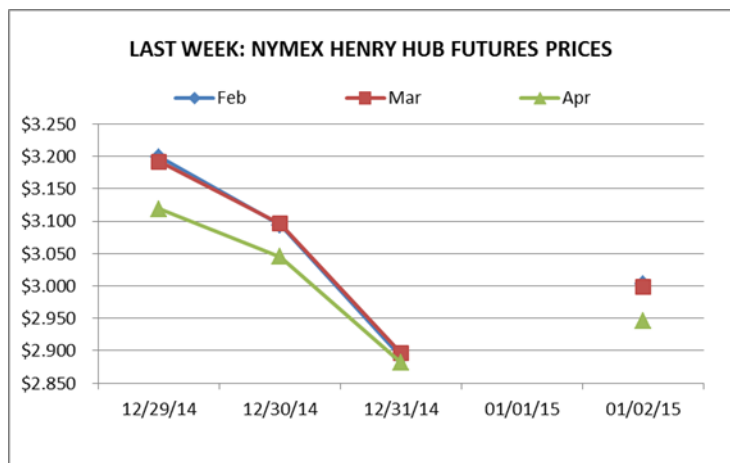
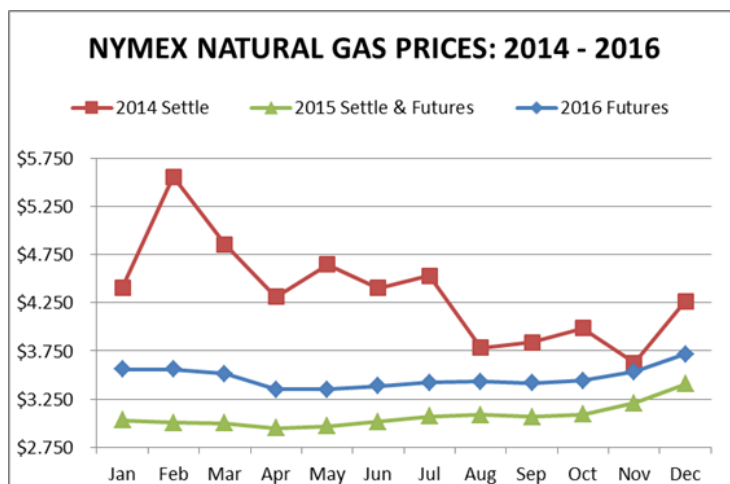
This week: U.S. energy use varies

U.S. energy use is predicted to vary this week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index



2015 prices. Natural gas prices for 2015, shown below in green, are the NYMEX settlement prices for Jan. and futures prices for the remainder of the year.



*Data for Jan. 1 is unavailable due to the New Year's Day Holiday.

NATURAL GAS PRICE SUMMARY AS OF 1/2/2015

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US Feb. futures				
NYMEX	\$3.003	-\$0.027	-\$1.852	\$3.377